KING'S CUP CHANGES

Minor Alterations to the Turning Points and Controls : Special Maps for Competitors

SINCE the details were published, with a map of the routes, in *Flight* of April 15, one or two minor changes have been made to the King's Cup Race regulations.

At Skegness, for instance, pilots will make their turn around the seaward end of the pier and not round a mark on Winthorpe aerodrome, which is now disused. At Whitby the turn will be made round the well-known Abbey and not, as originally suggested, round a non-existent castle.

More important are the facts that the control at Dublin has been transferred from Phœnix Park to Baldonnel aerodrome, and that the period of compulsory stop at Cardiff during the final has been increased to forty-five minutes. The first change was only to be expected, since Phœnix Park is not an aerodrome and might, in certain circumstances, provide very real difficulties for the pilots of the faster machines.

These modifications also mean that one or two small changes must be made to the distance figures given in the aforementioned issue. Four miles have been added to the eliminating course and three to the final making these 786.6 and 656.

An additional entry to those given a fortnight ago is that of Mr. Victor Dupree, who has nominated Mr. H. F. J. Broadbent to fly a B.A. Double Eagle with Gipsy Major engines. Mr. Broadbent is already down to fly the same type of machine with Gipsy Sixes, so presumably there is some doubt as to whether the Gipsy Six version can be brought to the line.

As we go to press we learn that Mr. Ken Waller will fly No. 5 in place of F/O. Clouston and Sqn. Ldr. D. Atcherley No. 18 in place of F/O. Quill.

The various turning points will be marked with a white cross, which must be kept on the inside of the turn, except in the case of Skegness, where the pierhead is used, and St. Bees Head, where the lighthouse will form the mark. At each control and at the finish competitors must fly at a height of 300-500ft. between two marking arrows and the period on the ground will be reckoned from that moment. Last year, it will be recalled, the time taken in taxying to the refuelling points was included in the flying time.

As in previous years, the aviation department of the Automobile Association is making up special strip maps for the use of competitors. These are, of course, cut from the standard A.A. and R.Ae.C. quarter-inch general flying maps, which are based on the Ordnance Survey editions. Pilots who own or have used these sets will know that, in addition to the normal markings, special stamps are used to indicate the different facilities at each and every aerodrome, to differentiate between military and civil landing grounds and to show such things as broadcasting stations (with their wavelengths), while all controlled zones are marked and tinted red.

These strips are twelve inches wide and are arranged so that each covers two control points, with an overlap repetition for the following section. Accurate tracks (purple for the eliminating course, and red for the final course) are drawn in, with magnetic courses and distances marked at ten-mile intervals in waterproof ink. The price of the complete set is £10, and, since the strips cover such large areas, pilots should not find that their use is limited to King's Cup practice and racing.

THE KING'S CUP RACE, SEPTEMBER 10 and 11.

No.	Reg.	Class.	Aircraft.	Engine.	Pilot.	Entrant.
1	G-AETK	A	T.K.4	Gipsy Major	R. J. Waight	Viscount Wakefield
2	G-AFAW	A	Miles Hobby	Gipsy Major	F. G. Miles	F. G. Miles
3	G-AFAA	B	Percival Mew Gull	Gipsy Six	Capt. E. W. Percival	Viscountess Wakefield
4	G-AEKL	B	Percival Mew Gull	Gipsy Six	C. E. Gardner	C. E. Gardner
5	G-ACSS	B	D.H. Comet	Two Gipsy Six	K. F. H. Waller	F. E. Tasker
6	G-AEXF	B	Percival Mew Gull	Gipsy Six	Alex. Henshaw	Alex. Henshaw
7	G-AEIN	B	B.A. Double Eagle	Gipsy Six	H. F. J. Broadbent	Victor Dupree
8	G-ADGP	B	Miles Hawk Speed Six	Gipsy Six	Flt. Lt. T. Rose	H. S. Horne
9	G-ADNO	A	T.K.2	Gipsy Major	F/O. G. R. de Havilland	Capt. G. de Havilland
10	G-ADNL	A	Miles Sparrowhawk	Gipsy Major	Wing Cdr. F. W. Stent	Maj. E. Howard
11	G-AEZL	B	Percival Vega Gull	Gipsy Six	F. C. J. Butler	F. C. J. Butler
12	G-AFAU	B	Percival Vega Gull	Gipsy Six	Giles Guthrie	Sir Connop Guthrie
13	G-AEYD	B	Percival Vega Gull	Gipsy Six	Miss L. Dillon and Capt. T. Neville Stack	Miss L. Dillon
14	G-AEZK	B	Percival Vega Gull	Gipsy Six	G. M. Tonge	G. M. Tonge
15	G-AEZJ	B	Percival Vega Gull	Gipsy Six	Derek Schreiber	Derek Schreiber
16	G-AELE	B	Percival Vega Gull	Gipsy Six	A. H. Hole	W. Lindsay Everard, M.P.
17	G-ADVV	B	B.A. Double Eagle	Two Gipsy Six	H. F. J. Broadbent	Victor Dupree
18	G-ABWH	A	Comper Swift	Gipsy III	Sqn. Ldr. D. Atcherley	W. L. Hope
19	G-AECU	B	Short Scion Senior	Four Pobjoy Niagara III	H. L. Piper	H. O. Short
20	G-ABWE	A	Comper Swift	Pobjoy Niagara III	S. T. Lowe	S. T. Lowe
21	G-ACRG	A	B.A. Eagle	Gipsy Major	C. M. McCarthy	C. M. McCarthy
22	G-AAVT	A	Hendy 302	Cirrus Major	C. S. Napier	C. S. Napier
23	G-AEZP	A	Miles Magister	Cirrus Major	Sqn. Ldr. E. C. T. Edwards	C. S. Napier
24	G-AENG	A	Miles Falcon	Gipsy Mk. I	Wing Cdr. E. G. Hilton	Wing Cdr. P. Sherren
25	G-AEZO	A	Miles Whitney Straight	Gipsy Major	Brig. Gen. A. C. Lewin	Brig. Gen. A. C. Lewin
26	G-AEVH	A	Miles Whitney Straight	Gipsy Major	Sqn. Ldr. A. V. Harvey	Sqn. Ldr. A. V. Harvey
27	G-AEWK	A	Miles Whitney Straight	Gipsy Major	E. J. Jobling-Purser	E. J. Jobling-Purser
28	G-AEMA	A	C. W. A. Cygnet	Gipsy Major	C. Hughesden	J. I. Waddington
29	G-AEZZ	A	Wicko	Cirrus Major	Flt. Lt. H. R. A. Edwards	C. S. Napier
30	G-ADID	A	B. A. Eagle	Gipsy Major	C. H. Willis	W. C. Potter
31	G-AEST	A	Moss-Monoplane	Pobjoy Niagara III	W. H. Moss	W. H. Moss

Classes : A = Up to 150 h.p. B = Exceeding 150 h.p.

Two Books on Models

"Petrol-Engined Model Aeroplanes," by C. E. Bowden; 3s. 6d., Percival Marshall and Co.

NO man is better qualified than Capt. Bowden to write about petrol models, for he was responsible for their modern revival, sponsored the tiny engines which spelt success, designed and built 20 petrol models, including Autogiros and flying-boats, and held the British record for five years. His vast experience is comprehensively and readably incorporated in his book, which includes several successful designs. It should be invaluable to those about to build, and of interest to all modellers.

"The Design and Construction of Model Aircraft," by D. A. Russell, A.I.Mech.E., A.I.E.E., 5s., Harborough Publishing Co.

Mr. Russell's viewpoint is that trial-and-error methods should give place to scientific calculation, particularly with large models. He discourses thoroughly on such matters as the boundary layer, trailing-edge vortices, performance calculations, etc., and includes numerous formulæ and the results of his wind-tunnel experiments. Even the non-mathematically-minded can find value and interest in this book, though one trusts that they wil not allow themselves to be discouraged from model aeronautics if they fail to follow fully the explanations given.

M. R. K.